

discouraged from joining by others ($p<.001$), not having an intrinsic commitment to donate ($p<.001$), feeling encouraged by one's culture or religion to join ($p<.05$), feeling like there are risks to donation ($p<.01$), and having a greater number of medical ($p<.001$), and work and family concerns ($p<.05$) about donation — were uniquely associated with higher levels of ambivalence after adjusting for the effects of other key indicators. We can conclude from these findings, that potential donors who are motivated by an intrinsic commitment to donate, rather than extrinsic pressure, are less ambivalent about donating. In addition, recruitment staff have a potentially critical role in reducing ambivalence among new recruits by providing information that may allay any unrealistic concerns recruits may have about the medical risks, and the impact of donation on work and family commitments.

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T-CELL DEPLETED ALLOGENEIC BONE MARROW TRANSPLANTATION FOLLOWED BY T CELL ADD-BACK IN PATIENTS WITH MULTIPLE MYELOMA

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Allogeneic haematopoietic transplantation is potentially curative for patients (pts) with multiple myeloma. However, a high treatment-related mortality contributes to poor overall survival. An allogeneic graft-versus-myeloma effect mediated by donor lymphocyte infusions has been demonstrated. Measures to minimize TRM while maintaining a graft-versus-host myeloma are needed. We evaluated the outcome of 21 patients (pts) treated with a conditioning regimen comprising TBI (1200cGy), BCNU (300mg/m²), etoposide (1200mg/m²), ARA-C (6gm/m²) and cyclophosphamide (90mg/Kg) followed by T cell depleted bone marrow transplantation. Donor T cells were infused after transplantation over a period of 2-3 months if acute GVHD grade α II was not seen. Cyclosporin was used for GVHD prophylaxis. Ten pts underwent transplantation using a sibling donor while 11 had an unrelated donor. There were 21 pts with a median age of 52 years (range 42-56); 14 were male and 7 female; median time from diagnosis to transplantation was 16 months (range 5-60); at diagnosis all pts had stage III disease; Ig type was IgG in 12 pts, IgA in 5 and light chain in 4. Seventeen pts had sensitive disease at time of transplantation. Twenty pts survived more than 21 days and are evaluable for engraftment. The median time to ANC $\geq 5 \times 10^9/L$ was 14 days (range 12-30) and to a platelet $\geq 25 \times 10^9/L$ was 29 (range 12-70). Five pts died before day 100. Cox proportional hazards models were used to identify factors associated with disease-free (DFS) and overall survival (OS). The risk factors considered: type of transplant (related vs unrelated), age (≤ 50 vs >50), acute GVHD, chronic GVHD, disease sensitivity, gender, immunoglobulin type and T cell add-back. Univariate analysis demonstrated that gender ($p=0.046$) and T cell add-back ($p=0.008$) were predictive of OS. Type of transplant ($p=0.047$) and T cell add-back ($p=0.005$) were predictive of DFS. In a multivariate model type of transplant and T cell add-back were significantly associated with OS and DFS. The two year estimated OS and DFS for pts receiving T cell add-back is 50% and 40% respectively and for those not receiving T cell add-back is 9% and 0%. Our study demonstrates that T cell add-back after allogeneic T cell depleted bone marrow transplantation induces significant graft-versus-myeloma effect.

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ALLOGENEIC BONE MARROW TRANSPLANTATION FOR MYELOFIBROSIS DUE TO AGNOGENIC MYELOID METAPLASIA (AMM) AND ESSENTIAL THROMBOCYTOSIS (ET): EXPERIENCE OF TWO BONE MARROW TRANSPLANT CENTERS

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Between August 1990 and June 2002, 25 patients with MF due to AMM (n=19) or ET (n=6) underwent alloBMT at PMH or VGH. The median age at transplant was 48.7 (Interquartile

range (IQR) 45.9-50.4) years, 18/25 were male and Lille risk groups at diagnosis were low (n=3), intermediate (n=13) and high (n=9) at diagnosis. Cytogenetics were abnormal in 8/19 cases tested. Seven patients had previously undergone splenectomy and none of the patients had received induction therapy for leukemic transformation. Transplants took place a median of 10.7 (IQR 5.67-26.5) months after diagnosis and median follow-up of surviving patients is 35 (IQR 21-61) months. Conditioning regimens were Cy/TBI (n=23) or Bu/Cy-2 (n=2), and all received CyA-Mtx for GVHD prophylaxis. Donors were matched (n=13) or mismatched (n=2) relatives or matched unrelated volunteers (n=10). The median cell dose was 2.8 (IQR 1.88-3.78) $\times 10^8$ MNC/kg. ANC $> 500/\mu L$ and platelets $> 20,000/\mu L$ were observed in 22/22 (median 25d.) and 17/22 (median 35d.) evaluable patients, respectively; median time to last RBC transfusion was 123 days. Prior splenectomy was associated with more rapid neutrophil recovery (20 vs. 27.5 days, $p=0.0019$). Primary graft failure occurred in two cases, but both patients successfully engrafted with a second transplant. Hepatic VOD occurred in 10 cases. Acute GVHD was grade II-IV in 13 and III-IV in 4 cases. Chronic GVHD occurred in 10/17 evaluable patients. Eighteen patients had at least one bone marrow biopsy after transplantation. Median time to freedom from fibrosis was 363d; at 18 months 84% of patients were free of fibrosis. A complete remission (defined as normalization of blood counts and absence of fibrosis and splenomegaly) occurred in 6 and CRP (as for CR with platelet count below normal) in 2 of 18 cases with repeat biopsies. Median survival was 13.1 (IQR 3.6-33.8) months from BMT, 49.8 (IQR 17-66) months from diagnosis. Kaplan-Meier estimate of 18-month overall survival was 48.4%. Secondary engraftment failure occurred in one patient who died of GVHD on day 109. Non-relapse mortality was observed in 10 cases and 4 patients died of progressive disease. We conclude that alloBMT offers a reasonable chance for resolution of MF, and may result in long-term disease-free survival.

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THE OTTAWA 10-YEAR EXPERIENCE IN ALLOGENEIC STEM CELL TRANSPLANTATION FOR FOLLICULAR LYMPHOMA

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Allogeneic hematopoietic stem cell transplants (allo-HSCT) have a number of potential advantages over an autologous hematopoietic stem cell transplant (AHSCT) in the treatment of follicular lymphoma (FL). We analyzed our experience in allo-HSCT for FL after establishing a program at our institution, 10 years ago. Between April 1992 and September 1999, 19 patients with FL underwent an allo-HSCT. The median age was 41.7 (29-55) years. 8/19 were male. The original diagnosis was FSCL (10/19), FML (4/19), FLCL (2/19) and 3/19 were transformed. 5/19 had a previous AHSCT. 6/19 had received 1 prior chemotherapy, 9/19 had received 2 prior chemotherapies and 4/19 had received >2 prior chemotherapies. 5/19 had received a prior AHSCT. 17/19 were transplanted from a related donor and 2 of these were syngeneic pairs. 13/17 who had a related donor received a CD34-selected marrow. The 2 syngeneic transplants used either unmanipulated marrow or PBSC. The remaining 2 related allo-HSCT received unmanipulated marrow. The conditioning regimen in 14/19 was VP-16 (60 mg/kg)/melphalan (140mg/m²)/TBI (500 [13/19] or 1200 [1/19]cGy). The remainder received BU/CY (4/19) or CY/TBI (1/19). 12/19 received 1.25 mg/kg ATG. 13/19 received only cyclosporin for GVHD prophylaxis while 4/19 received both cyclosporin and methotrexate and no GVHD prophylaxis was given to the syngeneic recipients. The median follow-up and range has been 4.3 (0 - 8.9) years. The median time and range to neutrophil ($>0.5 \times 10^9/L$) and platelet ($>20 \times 10^9/L$) engraftment was 17 (11 - 30) and 22 (8 - 168) days, respectively. Acute GVHD was seen in 4/19 patients. 3/4 had grade 2 - 3 GVHD. 5/19 had chronic GVHD. 5/19 developed CMV detected in the blood and